

## MEDICAL SCIENCES

### STUDY OF ACIDITY AND MICROFLORA OF STOMACH FOR PATIENTS WITH POLYPS IN HIM

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**Topicality.** Prolonged use of antisecretory drugs and low acidity of gastric juice are the causes of disorders of the microecology of the gastrointestinal tract. Hydrochloric acid destroys most of the microorganisms that enter the stomach [1]. The absence or reduction of hydrochloric acid leads to hypergastrinemia. Hypergastrinemia is a risk factor for the development of tumors [1; 2].

**The purpose:** is to evaluate the acidity and microflora in the patients with polyps.

**Material and methods.** We examined 35 from 97 (36%) healthy individuals (group I, comparison) and 62 from of 97 (64%) patients with gastric polyps (group II, main).

Group II was divided into 2 subgroups: II A and II B. II A subgroup comprised 32 from 62 (51,6%) patients with 1-2 gastric polyps. II B subgroup consisted of 30 from 62 (48,4 patients who had more than 2 gastric polyps).

The research was conducted on the basis of the National Academy of Medical Sciences of Ukraine State Institution «Shalimov National Institute of Surgery and Transplantology».

All patients underwent fibroesophagogastroduodenoscopy and examined the condition of the mucous membrane, identified polyps, took the material for biopsy and performed morphological examination.

We applied with Video *Endoscopy System* (manufactured by Olympus, Japan) and a set of standard tools.

For detection of *Helicobacter pylori* infection, a respiratory urease test (Helic-test), serological study (enzyme-linked immunosorbent assay IgG for *Helicobacter pylori*) and staining of histological sections of gastric biopsy specimen (Giemsa) were performed.

The acidity of the stomach was determined using an AC-1pH-E acidogastrograph. The study was performed on an empty stomach after exclusion of any medication for a week. The evaluation of the acid-forming function of the stomach was performed at the lowest pH (according to the pH levels of the stomach).

**Results.** In healthy subjects (group I, n = 35) normocidal status of gastric juice (pH = 1,6) was established. In patients with gastric polyps (group II, n = 62), an anacid or hypocidal status of acidity of gastric juice was detected.

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Patients of the subgroup II A (1-2 polyps, n = 32) showed moderate hypoacidity (pH = 2,3 – 3,5) of gastric juice.

Patients of the subgroup II B (more than 2 polyps, n = 30) had a established hypoacidity (pH = 3,6 – 6,9) or an anacid status (pH = more than 7,0) of gastric juice.

The differences in bacterial composition were established in the groups I and II. In 35 healthy individuals (group I), *Helicobacter pylori* (*H. pylori*) was not detected.

In 62 patients with gastric polyps (group II), *H. pylori* was detected. In 32 patients (51,6 in group II, gastric polyps were first established, which coincided with the presence of *Helicobacter pylori* in it.

In 30 patients (48,4%) of group II the recurrence of polyps was found. The recurrence of polyps has repeatedly been combined with the coexistence of *H. pylori* bacterial infection (according to the patient's medical record).

### **Conclusions.**

1. In patients with gastric polyps established low acidity (pH = 3,6 – 6,9 or pH = more than 7.0) of gastric juice was detected and *H. pylori* was detected.

2. The presence of *H. pylori* coincided with the recurrence of polyps in the stomach and its hypoacid or anacid state.

3. Lower pH was combined with the presence of multiple gastric polyps (in patients of subgroup II B).

**Prospects for research.** Against the background of low acidity of gastric juice, it is necessary to prevent and treat dysbacteriosis, which will have a positive effect on the condition of gastric mucous membranes and will reduce the likelihood of polyps in it.

### **References:**

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